

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-654. (Canceled)

655. (Previously Presented) A method for identifying a compound that may be useful for the treatment or prevention of a neurological disease or disorder, said method comprising the steps of:

(a) contacting a cell expressing a GPCR polypeptide substantially identical to a polypeptide having an amino acid sequence set forth in SEQ ID NOs: 552 or 553 with a candidate compound; and

(b) measuring the biological activity of said GPCR polypeptide expressed in said cell,

wherein altered biological activity of said GPCR polypeptide, relative to a cell not contacted with said compound, indicates that said candidate compound is a compound that may be useful for the treatment of a neurological disease or disorder.

656.-657. (Canceled)

658. (Previously Presented) A method for identifying a compound that may be useful for the treatment or prevention of a neurological disease or disorder, said method comprising the steps of contacting a GPCR polypeptide substantially identical to a polypeptide having an amino acid sequence set forth in SEQ ID NOs: 552 or 553 and a candidate compound; and determining whether said candidate compound interacts with said GPCR polypeptide, wherein interaction between said candidate compound and said

GPCR polypeptide identifies said candidate compound as a compound that may be useful for the treatment or prevention of a neurological disease or disorder.

659. (Previously Presented) A method for identifying a compound that may be useful for the treatment or prevention of a neurological disease or disorder, said method comprising the steps of contacting a GPCR polypeptide substantially identical to a polypeptide having an amino acid sequence set forth in SEQ ID NOs: 552 or 553, and disposed in a lipid membrane with a candidate compound; and determining whether said candidate compound interacts with said GPCR polypeptide, wherein interaction between said candidate compound and said GPCR polypeptide identifies said candidate compound as a compound that may be useful for the treatment or prevention of a neurological disease or disorder.

660. (Previously Presented) A method for identifying a compound that may be useful for the treatment or prevention of a neurological disease or disorder, said method comprising the steps of:

(a) providing (i) a GPCR polypeptide substantially identical to a polypeptide having an amino acid sequence set forth in SEQ ID NOs: 552 or 553 and (ii) a second polypeptide that interacts with said GPCR polypeptide;

(b) contacting said polypeptides with a candidate compound; and

(c) measuring interaction of said GPCR polypeptide and said second polypeptide, wherein an alteration in interaction of said GPCR polypeptide and said second polypeptide identifies said candidate compound that may be useful for the treatment or prevention of a neurological disease or disorder.

661. (Currently Amended) The method of any of claims 655 and 658-
~~662~~⁶⁶⁰, wherein said neurological disease or disorder is selected from the group consisting of: thermoregulatory dysfunction, metabolism disorders, metabolic neuropathies, anorexia nervosa, obesity, diabetes, diabetes insipidus, diabetic neuropathy,

activity disorders, attention deficit disorder, attention-deficit and disruptive behavior disorders, attention-deficit hyperkinetic disorders, and attention-deficit hyperactivity disorders, Asperger's syndrome, atypical autism, autism, autism spectrum disorder, circadian rhythm disorders, sleep disorders, learning disorders, memory disorders, dementia, Alzheimer's disease, anxiety, stress, addiction, abnormal social behaviors, bipolar disorder, bipolar type I disorder, bipolar type 2 disorder, major depression with psychotic disorders, mania, mania with psychotic features, mania without psychotic features, mental retardation, obsessive-compulsive (anankastic) personality disorder, obsessive-compulsive disorder, psychotic syndromes, schizoaffective disorder, schizoid personality disorder, schizophrenia, schizophrenia and other psychotic disorders and schizophrenia-like psychosis.

662. (Currently Amended) The method of any of claims 655 and 658-
~~662~~⁶⁶⁰, wherein said neurological disease or disorder involves one or more tissues
selected from the group consisting of hypothalamus, amygdala, pituitary, nervous system,
brainstem, cerebellum, cortex, frontal cortex, hippocampus, striatum, and thalamus.

663.-675. (Canceled)